Korespondensi Artikel

Breath Relaxation Technique on Menstrual Pain In Active Adolescents With Primary Dysmenorrhe

Journal of Science and Technology

- 1. Submitted to the Journal of Science and Technology: 23 04 2019
- 2. First revision: Accepted with major revision: 21 06 2019
- 3. Second revision, Minor revisions: 04 11 2019
- 4. Second revision submitted: 27 11 2019
- 5. Paper accepted for publication: 16 12 2019
- 6. Paper published: April 2020



Journal of Science and Technology - Manuscript ID JST-1637-2019 - Incomplete Submission

1 pesan

Journal of Science and Technology <onbehalfof@manuscriptcentral.com>

23 April 2019 pukul 10.30

Balas Ke: executive_editor.pertanika@upm.my

Kepada: kurniatidevip@gmail.com, kurniatidevip@unigal.ac.id

Cc: kurniatidevip@gmail.com, kurniatidevip@unigal.ac.id, titarohita@gmail.com, dininurbaeti@gmail.com, widyamayaningrum@gmail.com

NOTE: YOU HAVE ONE CHANCE TO CORRECT YOUR MANUSCRIPT AS PER PERTANIKA'S GUIDELINE

23-Apr-2019

Dear Miss Purnamasari.

Your Manuscript ID JST-1637-2019 titled "Breath Relaxation Technique on Menstrual Pain In Active Adolescents With Primary Dysmenorrhea" which you submitted to the Journal of Science and Technology has been unsubmitted from the Journal of Science and Technology. The reason of "unsubmission" is due to the following issue(s):

- *) Refer to Pertanika's Website for details on Publishing Charge (http://www.pertanika.upm.edu.my/publishing_charge.php)
- *) No DECLARATION FORM has been submitted (refer to the attachment). Please fill up the declaration form and submit as "Supplementary File NOT FOR Review".
- *) The MANUSCRIPT did not follow the correct format required by Pertanika.
- 1 MANUSCRIPT STRUCTURE. Manuscripts in general should be organised in the following order: Page 1 Running title, Page 2 Author(s) and Corresponding author information, Page 3 - Abstract, Page 4 - Introduction and followed by the rest of your paper.
- 2 IMRAD format. Your manuscript was not prepared in this order; Introduction, Materials and Methods, Results and Discussion, Conclusions, Acknowledgements, References, and Supplementary data (if available).

This issue(s) must be addressed prior to your resubmitting the article to Pertanika using the SAME MANUSCRIPT ID. JST-1637-2019. Please DO NOT create a new Manuscript ID.

Because we are trying to facilitate timely publication of manuscripts submitted to the Journal of Science and Technology, your edited manuscript should be submitted before 30 April 2019. If it is not possible for you to submit your revision by this date, we may have to consider your paper as REJECT.

Sincerely.

Chief Executive Editor, Journal of Science and Technology

4 lampiran



Declaration-Form-Ver-1-2019.doc





* INSTRUCTIONS-TO-AUTHORS.pdf



* Pertanika-reference-style---Complete.pdf 586K



* Pertanika-references-style--14-Apr-2016-.pdf

¹∆ 459K



Journal of Science and Technology - Decision on Manuscript ID JST-1637-2019.R1 (AA)

1 pesan

Journal of Science and Technology <onbehalfof@manuscriptcentral.com>

21 Juni 2019 pukul 14.38

Balas Ke: executive_editor.pertanika@upm.my

Kepada: kurniatidevip@gmail.com, kurniatidevip@unigal.ac.id

Cc: kurniatidevip@gmail.com, kurniatidevip@unigal.ac.id, titarohita@gmail.com, dininurbaeti@gmail.com, widyamayaningrum@gmail.com

21-Jun-2019

Dear Miss Purnamasari.

Manuscript ID JST-1637-2019.R1 entitled "Breath Relaxation Technique on Menstrual Pain In Adolescents With Primary Dysmenorrhea" which you submitted to the Journal of Science and Technology, has been reviewed. The comments of the reviewer(s) are included at the bottom of this letter. I invite you to respond to the reviewer(s)' comments and revise your manuscript.

To revise your manuscript, log into https://mc.manuscriptcentral.com/upm-jst and enter your Author Center, where you will find your manuscript title listed under "Manuscripts with Decisions." Under "Actions," click on "Create a Revision." Your manuscript number has been appended to denote a revision.

You may also click the below link to start the revision process (or continue the process if you have already started your revision) for your manuscript. If you use the below link you will not be required to login to ScholarOne Manuscripts.

*** PLEASE NOTE: This is a two-step process. After clicking on the link, you will be directed to a webpage to confirm. ***

https://mc.manuscriptcentral.com/upm-jst?URL_MASK=a3de75cf7634463aad2a21c4cb404fb5

You will be unable to make your revisions on the originally submitted version of the manuscript. Instead, revise your manuscript using a word processing program and save it on your computer. Please also highlight the changes to your manuscript within the document by using colored text.

Once the revised manuscript is prepared, you can upload it and submit it through your Author Center using the SAME Manuscript ID. JST-1637-2019.R1. Please DO NOT create a new Manuscript ID.

When submitting your revised manuscript, you will be able to respond to the comments made by EACH reviewer (POINT-BY-POINT) in the space provided. You can use this space to document any changes you make to the original manuscript. In order to expedite the processing of the revised manuscript, please be as specific as possible in your response to the reviewer(s).

IMPORTANT: Your original files are available to you when you upload your revised manuscript. Please delete any redundant files before completing the submission.

Because we are trying to facilitate timely publication of manuscripts submitted to the Journal of Science and Technology, your revised manuscript should be submitted BEFORE 05 July 2019. If it is not possible for you to submit your revision by this date, we may have to consider your paper as REJECT.

Once again, thank you for submitting your manuscript to the Journal of Science and Technology and I look forward to receiving your revision.

Sincerely

Chief Executive Editor, Journal of Science and Technology

Reviewer(s)' Comments to Author:

Reviewer: 1

Comments to the Corresponding Author

Dear author.

Journal of Science and Technology Manuscript: JST-1637-2019.R1

Breath Relaxation Technique on Menstrual Pain In Adolescents with Primary Dysmenorrhea

Title:

Title was not clear.

Is the study looking at the effect of Relaxation Technique? If yes, is it to eliminate the menstrual pain?

Is Breath Relaxation is proper term to use for the study?

Abstract

Suggestion to rephrase second sentence, as the sentence may reflect that the respondents have dysmenorrhea for 13-15 years duration.

Why the author refer the respondents as 'active' adolescents?

Author can briefly elaborate their results in abstract. No need to say it was presented in graph, it is understandable that the results will be presented in graph/table etc.

Key words:

Introduction:

Many sentences have grammatical issue

Author should elaborate on why Breath Relaxation Technique should be implemented on Primary Dysmenorrhea especially in adolescents.

Suggest to rephrase:

Lines 36-41, What are the two therapies that has synergistic effect? How is the effect?

Lines 45-50, Why suddenly 'herbal treatment' was suggested for primary dysmenorrhea, previous information need to be connected to this sentence.

Lines 11-12, What is 'ins' breathing. What is 'distinct deep breathing'?

Lines 24-31, What is the effect of relaxation to sex hormones, can it be elaborated?

Lines 31-44, Unable to understand the points written by author, seem to have missing sentences.

Lines 44-45, This sentence is a repetition of the sentence in line 7-9.

Lines 7-12, Why midwives are needed for treatment of primary dysmenorrhea?

Suggest to add reference for prevalence of dysmenorrhea (Lines 19-20)

Materials and Methods:

Study design was not properly explained and was not presented in proper sequence. Suggest author to put subheading for methods.

- 1. What does author means by 'selection of ingredients' of breath relaxation? 2. What is proper term use for 'accidental' sampling?
- 3. What does author means by 'fitting' respondents with breath relaxation.
- 4. What are the inclusion criteria? Is there any exclusion criteria?
- 5. The location and duration of sampling of the respondent was not mention.
- 6. Breathing relaxation technique was not properly explained. If use established model author needs to provide reference.
- Why cut point of 5-10 of VAS scale was chosen?
- 8. Flow chart is not properly represent the study design. How author got Population N=179?
- 9. Why author chose age of respondents on 13-15, but was mention in introduction adolescent was define by WHO from 10 to 19?
- 10. Statistical analysis should be mention in method rather than is result.

Result and discussion:

Result should be presented properly in table, defining

- i. Demographic data of respondents
- ii. Result of pre and post intervention

It can be supported by the graph Figure 5, but I think there is no need for individual graph for pre and post intervention (Figure and 4)

Author does not properly state their results. Author need to properly analyse their data.

- 1. Regarding average age, how author got 24.73? But their respondents are age from 13 to 15?
- 2. Regarding respondents grade, why it is 62.36 but their respondents are only from 7th to 8th grade (Table 1)
- 3. Why in Table 1 VAS score was divide Breath Relaxation Technique on Menstrual Pain In Adolescents with Primary Dysmenorrhea into Mid and High, what is the reference?
- 4. Why the results stated in table differences from the one stated in sentences eg. Mean VAS score in table 7.02, in sentence 6.33 (Line 7) another example decreased pain 9 to 4 after breath relaxation (Line 18)

Discussion

Author does not properly discuss their findings.

Conclusion

Author conclude a result that was not done. Is this study provide result for 24 and 48 hours post intervention, it was not mention in results and methods.

Acknowledgement

Should mention if there is any grant

Conflict of interest

Any ethical approval

References

Reviewer: 2

Comments to the Corresponding Author

- 1. The definition of primary dysmenorrhea as inclusion criteria in the study is not clear.
- 2. few grammatical and spelling errors
- 3. some of the sentences are incomplete and unable to be understood
- 4. inclusion and exclusion criteria were not mentioned in the paper, hence the subjects selection methods might be questionable.
- 5. The method for breath relaxation technique used as intervention in this study is not detailed out.
- 6. The result is not clear, it was mentioned in the conclusion about the control group, but no comparison done in the result between study and control group. in fact, nothing mentioned on the findings observed in control group n the result

Reviewer: 3 (with attachment)

Comments to the Corresponding Author

The clinical outcome from the manuscript is potentially interesting. Nonetheless, these are my recommendation:

- 1. I would suggest the manuscript for proof reading. Make sure that proof reading is done by professional language editor (compulsory to provide PROFESSIONAL EDITING CERTIFICATE).
- 2. I would suggest adding inclusion & exclusion criteria for more significant clinical values.
- 3. Stating the limition & recommendation from this study would also improve the overall quality of this manuscript
- 4. I noticed certain phrases like "selection of ingredients in making and modifying make

and modify movements of breath relaxation" are not clear and confusing



JST-1637-2019.R1-MS-Rev-Kit---Comments-on-MS--RW02-.pdf



Breath Relaxation Technique on Menstrual Pain In Adolescents With Primary Dysmenorrhea

SCIENCES, Health & community services < Health services research < MEDICAL AND HEALTH SCIENCES Keywords: Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea ABSTRACT Cyclic menstrual pain, one of the most common gynecologic complaints, is a crucial issue. Unfortunately, limited studies have focused on how to care for the menstrual pain in adolescents. This paper reports on the effective treatment for menstrual pain to mitigate or preclude menstrual pain aged 13–15 years in active adolescent in primary dysmenorrhea that is non-invasive to patients. The treatment was conducted by positioning the patient in a supine sleeping position. Each patient was guided to take 30 minutes of breathing relaxation techniques. The use of Visual Analog Scale (VAS) was intended to measure the subjects' painfulness level. This study included 47 respondents whose menstrual		
Manuscript Type: MEDICAL AND HEALTH SCIENCES, Clinical sciences < MEDICAL AND HEALTH SCIENCES, Obstetrics < Clinical sciences < MEDICAL AND HEALTH SCIENCES, Therapy < Clinical sciences < MEDICAL AND HEALTH SCIENCES, Therapy < Clinical sciences < MEDICAL AND HEALTH SCIENCES, Health & community services < Health services research < MEDICAL AND HEALTH SCIENCES Keywords: Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea ABSTRACT Cyclic menstrual pain, one of the most common gynecologic complaints, is a crucial issue. Unfortunately, limited studies have focused on how to care for the menstrual pain in adolescents. This paper reports on the effective treatment for menstrual pain to mitigate or preclude menstrual pain aged 13–15 years in active adolescent in primary dysmenorrhea that is non-invasive to patients. The treatment was conducted by positioning the patient in a supine sleeping position. Each patient was guided to take 30 minutes of breathing relaxation techniques. The use of Visual Analog Scale (VAS) was intended to measure the subjects' painfulness level. This study included 47 respondents whose menstrual pain was monitored in 30 minutes after the intervention. The monitoring results were then presented in the form of graphs. The findings of this study indicate a significant reduction of patients' pain. The study suggests that further studies focus on complementary treatments for overcoming menstrual pain. Keywords: Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea	Journal:	Journal of Science and Technology
MEDICAL AND HEALTH SCIENCES, Clinical sciences < MEDICAL AND HEALTH SCIENCES, Obstetrics < Clinical sciences < MEDICAL AND HEALTH SCIENCES, Therapy < Clinical sciences < MEDICAL AND HEALTH SCIENCES, Therapy < Clinical sciences < MEDICAL AND HEALTH SCIENCES, Health & community services < Health services research < MEDICAL AND HEALTH SCIENCES Keywords: Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea ABSTRACT Cyclic menstrual pain, one of the most common gynecologic complaints, is a crucial issue. Unfortunately, limited studies have focused on how to care for the menstrual pain in adolescents. This paper reports on the effective treatment for menstrual pain to mitigate or preclude menstrual pain aged 13–15 years in active adolescent in primary dysmenorrhea that is non-invasive to patients. The treatment was conducted by positioning the patient in a supine sleeping position. Each patient was guided to take 30 minutes of breathing relaxation techniques. The use of Visual Analog Scale (VAS) was intended to measure the subjects' painfulness level. This study included 47 respondents whose menstrual pain was monitored in 30 minutes after the intervention. The monitoring results were then presented in the form of graphs. The findings of this study indicate a significant reduction of patients' pain. The study suggests that further studies focus on complementary treatments for overcoming menstrual pain. Keywords: Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea	Manuscript ID	JST-1637-2019.R1
HEALTH SCIENCES, Obstetrics < Clinical sciences < MEDICAL AND HEALTH SCIENCES, Therapy < Clinical sciences < MEDICAL AND HEALTI SCIENCES, Health & community services < Health services research < MEDICAL AND HEALTH SCIENCES Keywords: Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea ABSTRACT Cyclic menstrual pain, one of the most common gynecologic complaints, is a crucial issue. Unfortunately, limited studies have focused on how to care for the menstrual pain in adolescents. This paper reports on the effective treatment for menstrual pain to mitigate or preclude menstrual pain aged 13–15 years in active adolescent in primary dysmenorrhea that is non-invasive to patients. The treatment was conducted by positioning the patient in a supine sleeping position. Each patient was guided to take 30 minutes of breathing relaxation techniques. The use of Visual Analog Scale (VAS) was intended to measure the subjects' painfulness level. This study included 47 respondents whose menstrual pain was monitored in 30 minutes after the intervention. The monitoring results were then presented in the form of graphs. The findings of this study indicate a significant reduction of patients' pain. The study suggests that further studies focus on complementary treatments for overcoming menstrual pain. Keywords: Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea	Manuscript Type:	Regular Article
ABSTRACT Cyclic menstrual pain, one of the most common gynecologic complaints, is a crucial issue. Unfortunately, limited studies have focused on how to care for the menstrual pain in adolescents. This paper reports on the effective treatment for menstrual pain to mitigate or preclude menstrual pain aged 13–15 years in active adolescent in primary dysmenorrhea that is non-invasive to patients. The treatment was conducted by positioning the patient in a supine sleeping position. Each patient was guided to take 30 minutes of breathing relaxation techniques. The use of Visual Analog Scale (VAS) was intended to measure the subjects' painfulness level. This study included 47 respondents whose menstrual pain was monitored in 30 minutes after the intervention. The monitoring results were then presented in the form of graphs. The findings of this study indicate a significant reduction of patients' pain. The study suggests that further studies focus on complementary treatments for overcoming menstrual pain. Keywords: Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea	Scope of the Journal:	HEALTH SCIENCES, Obstetrics < Clinical sciences < MEDICAL AND HEALTH SCIENCES, Therapy < Clinical sciences < MEDICAL AND HEALTH SCIENCES, Health & community services < Health services research <
Cyclic menstrual pain, one of the most common gynecologic complaints, is a crucial issue. Unfortunately, limited studies have focused on how to care for the menstrual pain in adolescents. This paper reports on the effective treatment for menstrual pain to mitigate or preclude menstrual pain aged 13–15 years in active adolescent in primary dysmenorrhea that is non-invasive to patients. The treatment was conducted by positioning the patient in a supine sleeping position. Each patient was guided to take 30 minutes of breathing relaxation techniques. The use of Visual Analog Scale (VAS) was intended to measure the subjects' painfulness level. This study included 47 respondents whose menstrual pain was monitored in 30 minutes after the intervention. The monitoring results were then presented in the form of graphs. The findings of this study indicate a significant reduction of patients' pain. The study suggests that further studies focus on complementary treatments for overcoming menstrual pain. Keywords: Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea	Keywords:	Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea
	Abstract:	Cyclic menstrual pain, one of the most common gynecologic complaints, is a crucial issue. Unfortunately, limited studies have focused on how to care for the menstrual pain in adolescents. This paper reports on the effective treatment for menstrual pain to mitigate or preclude menstrual pain aged 13–15 years in active adolescent in primary dysmenorrhea that is non-invasive to patients. The treatment was conducted by positioning the patient in a supine sleeping position. Each patient was guided to take 30 minutes of breathing relaxation techniques. The use of Visual Analog Scale (VAS) was intended to measure the subjects' painfulness level. This study included 47 respondents whose menstrual pain was monitored in 30 minutes after the intervention. The monitoring results were then presented in the form of graphs. The findings of this study indicate a significant reduction of patients' pain. The study suggests that further studies focus on complementary treatments for overcoming menstrual pain. Keywords: Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea

SCHOLARONE™ Manuscripts

Breath Relaxation Technique on Menstrual Pain



BREATH RELAXATION TECHNIQUE ON MENSTRUAL PAIN IN ADOLESCENTS WITH PRIMARY DYSMENORRHEA

ABSTRACT

Cyclic menstrual pain, one of the most common gynecologic complaints, is a crucial issue. Unfortunately, limited studies have focused on how to care for the menstrual pain in adolescents. This paper reports on the effective treatment for menstrual pain to mitigate or preclude menstrual pain aged 13–15 years in adolescent in primary dysmenorrhea that is non-invasive to patients. The treatment was conducted by positioning the patient in a supine sleeping position. Each patient was guided to take 30 minutes of breathing relaxation techniques. The use of Visual Analog Scale (VAS) was intended to measure the subjects' painfulness level. This study included 47 respondents whose menstrual pain was monitored in 30 minutes after the intervention. The monitoring results were then presented in the form of graphs. The findings of this study indicate a significant reduction of patients' pain. The study suggests that further studies focus on complementary treatments for overcoming menstrual pain.

Keywords: Adolescents, Breath Relaxation, Menstrual Pain, Primary Dysmenorrhea

INTRODUCTION

Menstrual pain is one of the most common gynecologic complaints which defined as cyclic pain that occurs in association with menstruation (Bektaş et al., 2010; Tu et al., 2010). The menstrual disturbances as a health problem among young girls affect not only reproductive, but also physical health and quality of life (Adib Rad et al., 2018). Around 1.2 billion people, or 1 in 6 of the world's population, are adolescents aged 10 to 19 (World Health Organization, 2014). Estimates of the prevalence of females who experience dysmenorrhea vary widely from 16.8% to 81%. It can be severe enough to interfere with daily activities and cause absence from school and work (Yonglitthipagon et al., 2017). Studies conducted in Asia and New Zealand showed that approximately 75% to 95% of women experience menstrual distress symptoms and that moderate to severe dysmenorrhea constitutes from 42% to 73% of the cases (Chen, Wang, Chiu, & Hu, 2015).

Pharmacological efforts can be performed by administering analgesic drugs as pain relievers (Smeltzer et al., 2008), pain management experienced by individuals can be through pharmacological intervention, collaborated with physicians or other primary care providers to the patient. The interaction that occurs between these therapies have mutually synergistic effect as between the two can be mutually augmented by the therapeutic work without adding to the ill effects or reduce them (Widyawati, Hadisaputro, Anies, & Soejoenoes, 2016). This is supported by research that proves, there are side effects when patients take them for a long time. It is therefore against this backdrop that herbal medicines are suggested as an alternative source of treatment for primary dysmenorrhea (Sosorburam et al., 2019), so a more *alternative treatments* is needed.

Relaxation techniques provide us with excellent methods that can be practiced with awareness anytime at our discretion (Romas & Sharma, 2017). One specific respiratory maneuver instanting is both popularly and scientifically linked to distinct deep breaths (Vlemincx, Van Diest, & Van den Bergh, 2016). Mind-body science has now reached a stage where it should be accepted (Rakel, 2017). A meta-analysis of 47 actively-controlled trials with 3515 participants showed that participation in mindfulness instruction programming is effective for improving self-reported symptoms of anxiety, depression, and pain (Sibinga, 2016). In a relaxed state, the body will stop production of the hormone adrenaline and all the hormones that are needed during stress (Bennett, 2017; Bojorquez et al., 2017; Boyanova, 2017). When reducing stress, it reduces the production of both sex hormones (Navas, Jiménez, & Asuero, 2012), because of the need for relaxation to provide an opportunity for the body to produce hormones that are important to get menstruation that avoids pain (Droit-Volet, Fanget, & Dambrun, 2015). Spontaneous breathing in healthy persons is characterized by substantial variability (Jafari et al., 2016; Mailhot-Larouche, Lortie, Marsolais, Flamand, & Bossé, 2017; Romas & Sharma, 2017; Vlemincx, Taelman, Van Diest, & Van den Bergh, 2010)First, take a deep breath can reduce hypoxia and hypercapnia (Vlemincx et al., 2010).

Lower rates (24.2%) have been reported for Asia, with 84.2% for Southeast Asia, 68.7% for Eastern Asia, 74.8% for the Middle East, and 54.0% for Southern Asia. The prevalence reported for Indonesia is 55% (Astutik, Santoso, & Yuliwar, 2015). It can be severe enough to interfere with daily activities and cause absence from school and work (Nag, Dip, & Kodali, 2013). Relaxation techniques provide us with excellent methods that can be practiced with awareness anytime at our discretion. Research on alternative treatments in the process of pain management to intensity of pain in menstrual pain will be very helpful in

identifying and providing care by midwives (Moyer, Seefeldt, Mann, & Jackley, 2011). The results of this study are expected to be the basic data as a cut of point reference in determining alternative treatments of pain, so midwife services can run effectively according to the pain management experienced by the client.

MATERIALS AND METHODS

This research begins by selection of ingredients in making and modifying make and modify movements of breath relaxation. Before taking the data, the first thing to do is to identify the respondent in accordance with the criteria set by the researcher, then the respondent is given informed consent if the respondent agrees to the data collection by questionnaire. After the data collection is complete the respondent is fitted with breath relaxation serves to menstrual pain. The research design used pre experiment. This research was conducted with the sampling technique used was accidental sampling, the number of samples was 47 respondents of active adolescents with menstrual pain by choosing subjects whose representation was determined based on the inclusion criteria at retrieval is done after the respondent agrees with breath axation techniques. Use positions of the client and movements lines mentioned for the basic position, according to the operational standard shown in Figure 1.

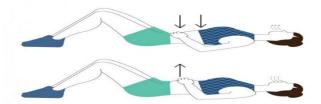


Figure 1. The reference position of breath relaxation technique

Data retrieval begins when respondents experience menstrual pain with a 5-10 VAS pain scale, then the intervention was carried out for 30 minutes. A baseline

assessment before the intervention was conducted using a questionnaire to collect data on the demographics of the participants and their pain levels. The questionnaire included questions on pain measured using a tenth-point scale. This instruction was provide by a trainer who was certified.

The results of the respondent pain scale questionnaire were collected and then taken to be analyzed by researchers assisted by enumerators. Furthermore, the data is presented in the form of an average value distribution of the results of data retrieval. The data that appears is created by the trend results from the measurement results. The research flow chart is shown in Figure 3.

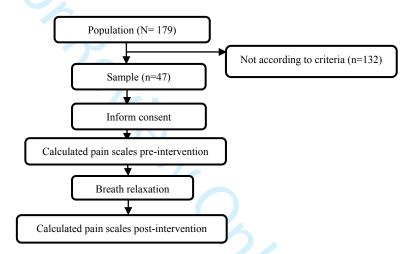


Figure 2. Flowchart

RESULT AND DISCUSSION

Characteristics of Respondent

This study shows that the average age characteristics of respondents are (24.73 ± 2.71) years with the age range of respondents is 13-15 years. The average respondent's grade is (62.36 ± 14.69) with a range of 7^{th} -8th. The average pain

scale of the Visual Analog Scale (VAS) respondent was (6.33 ± 1.63) with a range of 5-10 pain scales. Characteristics of respondents are shown in table 1.

Table 1

Characteristics of respondents

Charac	eteristics	N.	umber of	Percentage	Mean
		Re	spondents	(%)	
			(N)		
	13 y.o		22	46.80	13.97
Age	14 y.o		4	8.51	
	15 y.o		21	44.69	
Grade	7^{th}		24	51.06	7
	8 th		23	49.94	
VAS	Mid		32	68.08	7.02
scale					
	High		15	31.02	

Overview of Menstrual pain using VAS

Table 2

Distribution and average electrical activity of the lower back muscles

Variable	Pre		Post		p
	median	Max-	median	Max-min	value
		min			
Menstrual	6.39	10-5	1.48	6-2	.000
Pain					

The results of intervention were analyzed using Wilcoxon ranks test, it indicated that the median post-test ranks, Mdn = 1.48, were statistically significantly higher that the median pre-test ranks, p < .000. Based Distribution of data from the analysis results obtained a significant level (p-value) of 0.000, it means that menstrual pain level in respondents was significantly different. Based on table 2 above it can be seen that the average frequency of menstrual pain in forty-seven respondent enrolled in this study were decreased of pain in equal to 9 to 4 after given breath relaxation.

1. Pretest

The results of this study indicate the frequency of menstrual pain in active adolescent has a tendency to vary between one and the other. The average maximum frequency that occurs in menstrual pain on a scale of ten and the average minimum pain on a scale of six. Trends in the menstrual pain in active adolescents with primary dysmenorrhea are shown in figure 3.

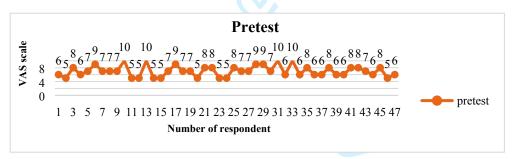


Figure 3.

Trends in the pretest of VAS scale

2. Posttest

The average maximum frequency that occurs in menstrual pain after intervention on a scale of six and the minimum pain average on a scale of two. Menstrual pain trends in active adolescents with primary dysmenorrhea are shown in figure 4.

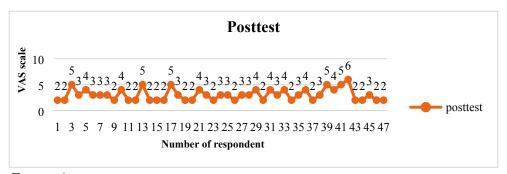


Figure 4.

Trends in the posttest of VAS scale

VAS scale menstrual pain has a tendency to be directly proportional to pretest of breath relaxation technique, moderate to heavy scale with a scale of moderate as many as 30 people (63.83%), scale of heavy as many as 17 people (36.17%), with an average pain scale 7.02. VAS scale for posttest proportional of breath relaxation technique were moderate to mild scale with a scale of moderate as many as 6 people (12.77%), scale of mild as many as 31 people (87.23%), with an average pain scale 3.04. The trend of comparison of VAS scale trends pretest and post test breath relaxation technique is shown in Figure 5.

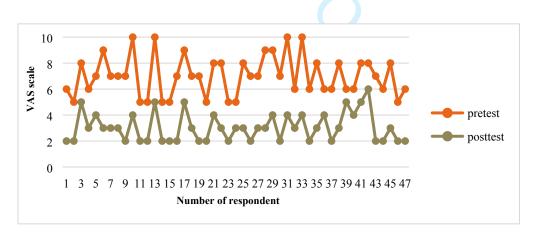


Figure 5.
Comparison of VAS scale trends pretest and posttest breath relaxation technique

The decrease in the intensity of menstrual pain occurs because the students practice breathing relaxation technique within 30 minutes, done when students feel menstrual pain. Previous study shows that the technique of deep breath relaxation is a form of nursing care in which case the health worker teaches the client how to do a deep breath, slow breath (hold maximum inspiration) and how to breathe slowly, in addition to reducing the intensity of pain (Bojorquez et al., 2017), deep breathing relaxation techniques can also improve lung ventilation and increase blood oxygenation (Smeltzer et al., 2008). These findings corroborate previous studies showing significant decreases in acute negative affect in response to a breath relaxation session (Lin, Tai, & Fan, 2014; Lindenmann et al., 2012) and suggest that breath relaxation can buffer against negative affect, perhaps by decreasing rumination and change affective appraisals and coping with stress (Thelwall, 2017).

Breathing exercise can boosts the relaxation and allow participant to focus in mind-body to change their thought on their pain. Based on the results of the study showed a decrease in the intensity of menstrual pain in female students when practicing breathing relaxation techniques in approximately 30 minutes. This study still uses questionnaire instruments in determining the results of research, so as to enable the occurrence of bias. Further research should be developed with pain measurements using biomarkers to improve the objectivity of the study results.

CONCLUSION

The decrease of menstrual pain in active adolescents with primary dysmenorrhea using breath relaxation technique shows a more quantitative value when compared to control group results of this study indicate that the prevalence of menstrual pain in active adolescents with primary dysmenorrhea decreases

from 76% in the first 24 hours to 22% in the first 48 hours of menstrual pain. There was a decrease in menstrual pain scores in 46.6% of respondents with moderate to severe criteria for pain experienced on the first day. Breathing relaxation interventions have a tendency to be directly proportional to the reduction in the scale of VAS pain experienced by patients. While in the examination of the group control the results in the form of a pain number scale felt by the respondent where the value is showed no significant.

ACKNOWLEDGEMENT

The authors gratefully acknowledge Galuh University for funding this publication and also express their appreciation to the Faculty of Health Sciences, Galuh University for sponsoring the publication of this research.

CONFLICT OF INTEREST

There is no conflict of interest

REFERENCES

- Adib Rad, H., Basirat, Z., Bakouei, F., Moghadamnia, A. A., Khafri, S., Farhadi Kotenaei, Z., . . . Kazemi, S. (2018). Effect of Ginger and Novafen on menstrual pain: A cross-over trial. *Taiwanese Journal of Obstetrics and Gynecology*, 57(6), 806-809. doi: https://doi.org/10.1016/j.tjog.2018.10.006
- Astutik, H., Santoso, A. H., & Yuliwar, R. (2015). The Effect Of Noni Fruit Juice (Morinda Citrifolia) In Decreasing Menstrual Pain (Dysmenorrhea)-Phase Ii Experiment.
- Bektaş, H., Bilsel, Y., Sarı, Y. S., Ersöz, F., Koç, O., Deniz, M., . . . Huq, G. E. (2010). Abdominal wall endometrioma; a 10-year experience and brief review of the literature. *Journal of Surgical Research*, 164(1), e77-e81.

- Bennett, J. (2017). Beneficial Redundancy—Did We Forget the Benefit of Auscultation of Breath Sounds? *Journal of Oral and Maxillofacial Surgery*, 75(5), 886-887.
- Bojorquez, J. Z., Bricq, S., Acquitter, C., Brunotte, F., Walker, P. M., & Lalande, A. (2017). What are normal relaxation times of tissues at 3 T? *Magnetic Resonance Imaging*, *35*, 69-80.
- Boyanova, L. (2017). Stress hormone epinephrine (adrenaline) and norepinephrine (noradrenaline) effects on the anaerobic bacteria. *Anaerobe*.
- Chen, H.-M., Wang, H.-H., Chiu, M.-H., & Hu, H.-M. (2015). Effects of acupressure on menstrual distress and low back pain in dysmenorrheic young adult women: an experimental study. *Pain Management Nursing*, *16*(3), 188-197.
- Droit-Volet, S., Fanget, M., & Dambrun, M. (2015). Mindfulness meditation and relaxation training increases time sensitivity. *Consciousness and cognition*, 31, 86-97.
- Jafari, H., Van de Broek, K., Plaghki, L., Vlaeyen, J. W., Van den Bergh, O., & Van Diest, I. (2016). Respiratory hypoalgesia? Breath-holding, but not respiratory phase modulates nociceptive flexion reflex and pain intensity. *International Journal of Psychophysiology*, 101, 50-58.
- Lin, I., Tai, L., & Fan, S. (2014). Breathing at a rate of 5.5 breaths per minute with equal inhalation-to-exhalation ratio increases heart rate variability. *International Journal of Psychophysiology*, 91(3), 206-211.
- Lindenmann, J., Matzi, V., Neuboeck, N., Maier, A., Stark, G., & Smolle-Juettner, F. M. (2012). When swallowing takes your breath. *Surgery*, 151(4), 628-629.
- Mailhot-Larouche, S., Lortie, K., Marsolais, D., Flamand, N., & Bossé, Y. (2017). An in vitro study examining the duration between deep inspirations on the rate of renarrowing. *Respiratory Physiology & Neurobiology*, 243, 13-19.
- Moyer, C. A., Seefeldt, L., Mann, E. S., & Jackley, L. M. (2011). Does massage therapy reduce cortisol? A comprehensive quantitative review. *Journal of bodywork and movement therapies*, 15(1), 3-14.

- Nag, U., Dip, P., & Kodali, M. (2013). Effect of yoga on primary dysmenorrhea and stress in medical students. *IOSR-JDMS*, 4(1), 69-73.
- Navas, M., Jiménez, A., & Asuero, A. (2012). Human biomarkers in breath by photoacoustic spectroscopy. *Clinica Chimica Acta*, 413(15), 1171-1178.
- Rakel, D. (2017). *Integrative Medicine E-Book*: Elsevier Health Sciences.
- Romas, J. A., & Sharma, M. (2017). *Practical stress management: A comprehensive workbook:* Academic Press.
- Sibinga, E. M. (2016). "Just This Breath..." How Mindfulness Meditation Can Shift Everything, Including Neural Connectivity. *EBioMedicine*, 10, 21-22.
- Smeltzer, S., Bare, B., Hinkle, J., Cheever, K., Townsend, M. C., & Gould, B. (2008). *Brunner & Suddarth's Textbook of Medical Surgical Nursing 12th Edition*: Wolters Kluwer: Lippincott Williams and Wilkins.
- Sosorburam, D., Wu, Z.-g., Zhang, S.-c., Hu, P., Zhang, H.-y., Jiang, T., . . . He, X. (2019). Therapeutic effects of traditional Chinese herbal prescriptions for primary dysmenorrhea. *Chinese Herbal Medicines*, 11(1), 10-19. doi: https://doi.org/10.1016/j.chmed.2018.11.001
- Thelwall, M. (2017). TensiStrength: Stress and relaxation magnitude detection for social media texts. *Information Processing & Management*, 53(1), 106-121.
- Tu, C.-H., Niddam, D. M., Chao, H.-T., Chen, L.-F., Chen, Y.-S., Wu, Y.-T., . . . Hsieh, J.-C. (2010). Brain morphological changes associated with cyclic menstrual pain. *Pain*, *150*(3), 462-468.
- Vlemincx, E., Taelman, J., Van Diest, I., & Van den Bergh, O. (2010). Take a deep breath: the relief effect of spontaneous and instructed sighs. *Physiology & behavior*, 101(1), 67-73.
- Vlemincx, E., Van Diest, I., & Van den Bergh, O. (2016). A sigh of relief or a sigh to relieve: The psychological and physiological relief effect of deep breaths. *Physiology & behavior*, 165, 127-135.
- Widyawati, M. N., Hadisaputro, S., Anies, A., & Soejoenoes, A. (2016). Effect of Massage and Aromatherapy on Stress and Prolactin Level among

Primiparous Puerperal Mothers In Semarang, Central Java, Indonesia. *Belitung Nursing Journal*, 2(4).

World Health Organization. (2014). Adolescents: health risks and solutions. *Fact sheet*, *345*.

Yonglitthipagon, P., Muansiangsai, S., Wongkhumngern, W., Donpunha, W., Chanavirut, R., Siritaratiwat, W., . . . Janyacharoen, T. (2017). Effect of yoga on the menstrual pain, physical fitness, and quality of life of young women with primary dysmenorrhea. *Journal of Bodywork and Movement Therapies*.



Journal of Science and Technology - Decision on Manuscript ID JST-1637-2019.R2 (AA-2C)

1 pesan

Journal of Science and Technology <onbehalfof@manuscriptcentral.com>

4 November 2019 pukul 09.02

Balas Ke: executive_editor.pertanika@upm.edu.my

Kepada: kurniatidevip@gmail.com, kurniatidevip@unigal.ac.id

Cc: kurniatidevip@gmail.com, kurniatidevip@unigal.ac.id, titarohita@gmail.com, dininurbaeti@gmail.com, widyamayaningrum@gmail.com

04-Nov-2019

Dear Miss Purnamasari

Manuscript ID JST-1637-2019.R2 entitled "THE EFFECT OF DEEP BREATHING EXERCISES ON MENSTRUAL PAIN PERCEPTION IN ADOLESCENTS WITH PRIMARY DYSMENORRHEA" which you submitted to the Journal of Science and Technology, has been reviewed. The comments of the reviewer(s) are included at the bottom of this letter. I invite you to respond to the reviewer(s)' comments and revise your manuscript.

To revise your manuscript, log into https://mc.manuscriptcentral.com/upm-jst and enter your Author Center, where you will find your manuscript title listed under "Manuscripts with Decisions." Under "Actions," click on "Create a Revision." Your manuscript number has been appended to denote a revision.

You may also click the below link to start the revision process (or continue the process if you have already started your revision) for your manuscript. If you use the below link you will not be required to login to ScholarOne Manuscripts.

*** PLEASE NOTE: This is a two-step process. After clicking on the link, you will be directed to a webpage to confirm. ***

https://mc.manuscriptcentral.com/upm-jst?URL_MASK=5387241940484997916304ebd1b0d3cf

You will be unable to make your revisions on the originally submitted version of the manuscript. Instead, revise your manuscript using a word processing program and save it on your computer. Please also highlight the changes to your manuscript within the document by using colored text

Once the revised manuscript is prepared, you can upload it and submit it through your Author Center using the SAME Manuscript ID. JST-1637-2019.R2. Please DO NOT create a new Manuscript ID.

When submitting your revised manuscript, you will be able to respond to the comments made by EACH reviewer (POINT-BY-POINT) in the space provided. You can use this space to document any changes you make to the original manuscript. In order to expedite the processing of the revised manuscript, please be as specific as possible in your response to the reviewer(s).

IMPORTANT: Your original files are available to you when you upload your revised manuscript. Please delete any redundant files before completing the submission.

Because we are trying to facilitate timely publication of manuscripts submitted to the Journal of Science and Technology, your revised manuscript should be submitted BEFORE 18 November 2019. If it is not possible for you to submit your revision by this date, we may have to consider your paper as REJECT.

Once again, thank you for submitting your manuscript to the Journal of Science and Technology and I look forward to receiving your revision.

Sincerely.

Chief Executive Editor, Journal of Science and Technology

Reviewer(s)' Comments to Author:

Reviewer: 1 (with attachment)

Comments to the Corresponding Author

Please refer to file attached

Reviewer: 2

Comments to the Corresponding Author

the study is good, however:

- 1. why the inclusion criteria was repeated twice in your flowchart (any raeson for that?)
- 2. this intervention is done in a group of patient with primary dysmenorrhea. Did you compare the findings with another group with similar problem, but did not went through your intervention? to get more reliable result
- 3. your result and discussion should be written seperately
- 4. you suggesting using biomarkers? which one particularly? and how does it contribute to ore accurate result? because you did not discuss on any biomarkers in your paper



JST-1637-2019.R2-MS-Rev-Kit---Comments-on-PDF--RW01-.pdf 84K

Journal of Science and Technology (2nd review)

Manuscript: JST-1637-2019.R2

THE EFFECT OF DEEP BREATHING EXERCISES ON MENSTRUAL PAIN PERCEPTION IN ADOLESCENTS WITH PRIMARY DYSMENORRHEA

Contents	Remarks
Title	-
Abstract	Suggestion to remove word 'sleeping' in line 24
Key words	-
Introduction	Suggest to rephrase: Lines 36-42. What do you mean by 'without adding ill effects or reducing them'? Line 45. Replace word 'backdrop' Line 48-49, suggest to rephrase or remove 'so that a more alternative treatment is needed' Line: Eloborate more 'the prevalence for Indonesia is 55%' Line: Rephrase line 26-32 Line: 47-48, elaborate more Line: 8-9, Rephrase and elaborate. Why you want to intensify the pain?
Materials and Methods	Data collection and procedures
	9. Why author chose age of respondents on 13-15
Result and discussion	Can you elaborate subject that were included as control group? Suggest to remove sentence 38-43, as it is understandable the meaning of p<0.000

	Where is the data (in table 2) that mentioned about the frequency of the pain? You just mentioned the menstrual pain. It also was not mentioned in your method Rephrase Line 21 to 34 Line 8-12, your study found association or cause and effect?
Discussion	-
Conclusion	Conclusion should be concise. You do not elaborate about control group earlier, why it appear in conclusion. Does your study has control group, or it involve the pre and post group?
Acknowledgement	-
Conflict of interest	-
References	-



27 November 2019 pukul 08.34

ACCEPTANCE OF MANUSCRIPT ID. JST-1637-2019.R3 FOR PUBLICATION

1 pesan

kurniatidevip@unigal.ac.id < kurniatidevip@unigal.ac.id >

Balas Ke: journal.officer-2@upm.edu.my
Kepada: onbehalfof@manuscriptcentral.com
Cc: titarohita@gmail.com, dininurbaeti@gmail.com, widyamayaningrum@gmail.com

27-Nov-2019

Dear Journal Officer,

I am writing to acknowledge receipt of your email regarding the acceptance of our manuscript titled "THE EFFECT OF DEEP BREATHING EXERCISES ON MENSTRUAL PAIN PERCEPTION IN ADOLESCENTS WITH PRIMARY DYSMENORRHEA" (Manuscript ID. JST-1637-2019.R3).

We are grateful for the positive feedback and are pleased to hear that our paper has been accepted for publication. We appreciate the time and effort of the referees and the Editorial Board in reviewing our manuscript.

Thank you for considering our work for publication. We look forward to the upcoming issue and any further instructions or updates regarding the publication process.

Sincerely, Kurniati Purnamasari kurniatidevip@gmail.com kurniatidevip@unigal.ac.id



ACCEPTANCE OF MANUSCRIPT ID. JST-1637-2019.R3 FOR PUBLICATION

1 pesan

Journal of Science and Technology <onbehalfof@manuscriptcentral.com>

16 Desember 2019 pukul 07.34

Balas Ke: journal.officer-2@upm.edu.my

Kepada: kurniatidevip@gmail.com, kurniatidevip@unigal.ac.id

Cc: kurniatidevip@gmail.com, kurniatidevip@unigal.ac.id, titarohita@gmail.com, dininurbaeti@gmail.com, widyamayaningrum@gmail.com

16-Dec-2019

Dear Author(s)

I am writing to you in reference to an article entitled, "THE EFFECT OF DEEP BREATHING EXERCISES ON MENSTRUAL PAIN PERCEPTION IN ADOLESCENTS WITH PRIMARY DYSMENORRHEA" author(s): Purnamasari, Kurniati; Rohita, Tita; Zen, Dini; Ningrum, Widya submitted to Pertanika on 28-Apr-2019 for intended publication in JST.

Your paper has been anonymously peer-reviewed by two to three referees competent in the specialized areas appropriate to your manuscript independently evaluating the scientific quality of the manuscript.

I am pleased to tell you that based on the clarity, technical approach and scientific validity presented; your paper has been accepted by the Editorial Board on 27-Nov-2019, and is TENTATIVELY scheduled for publication in JST Vol. 28 (2) Apr. 2020.

I thank you for considering Pertanika as your preferred Journal.

Sincerely, Journal Officer Journal of Science and Technology